- A piece of 6"-tall, 6"-diameter plastic pipe equipped with an end cap, and a foam insert appropriate to securely hold the sample bottle inside the pipe. This design was used successfully on the U.S. EPA-funded Rouge River National Wet Weather Demonstration Project (Detroit, MI).
- A metal base plate (aluminum or stainless steel) weighted so as to submerge the sampler, attached to an upper plate by threaded metal rods. The upper plate should have a cutout appropriate to allow the sample bottle neck to protrude above it. The upper plate is secured to the threaded rods with wing nuts, holding the sample bottle securely between the upper and lower plates. This design was used successfully in the UGLCCS study.

The harness should be attached to an appropriate length of rope (1/4" nylon or polypropylene rope recommended), which must be long enough to allow the bottle/harness unit to be lowered to within a foot or two of the bottom. Between stations, the harness and rope can be conveniently stored in a plastic bucket.

This harness can also be used for collecting water samples for other analyses (total suspended solids, nutrients, etc.) by substituting the appropriate sample bottle for the glass 1-L bottle.

3.2 Procedure

[Note: steps marked with "**" denote general descriptions of activities that will vary from project to project, the details of which are described in detail in the project-specific Field Sampling Plan.]

1. Establish position on station and record location in the field notebook.** Appropriate procedures could include use of a global positioning system, triangulation on local landmarks, careful notations on a detailed map, etc.
2. Label bottle with station number (or other identifier), date, and time, and wrap label with clear waterproof tape.
3. Place a clean filler cap on a pre-cleaned 1-liter amber glass bottle. Take care to keep the bottle's original cap clean; wrapping it in solvent-rinsed aluminum foil is recommended.
4. Secure the bottle in the bottle harness.
5. Place the bottle into the water column, and begin raising and lowering the bottle and harness up and down through the water column until the bottle is full. This will typically take 2 to 4 minutes. Use caution not to let the bottle come in contact with the sediment, or sample the surface water film; see Section 4.
6. When the sample bottle is full, remove it from the harness and replace the filler cap with the original bottle cap.
7. Place the bottle in a zip lock bag, and place into an ice chest. Place on ice until transfer to the analytical laboratory.